EL 977166403US

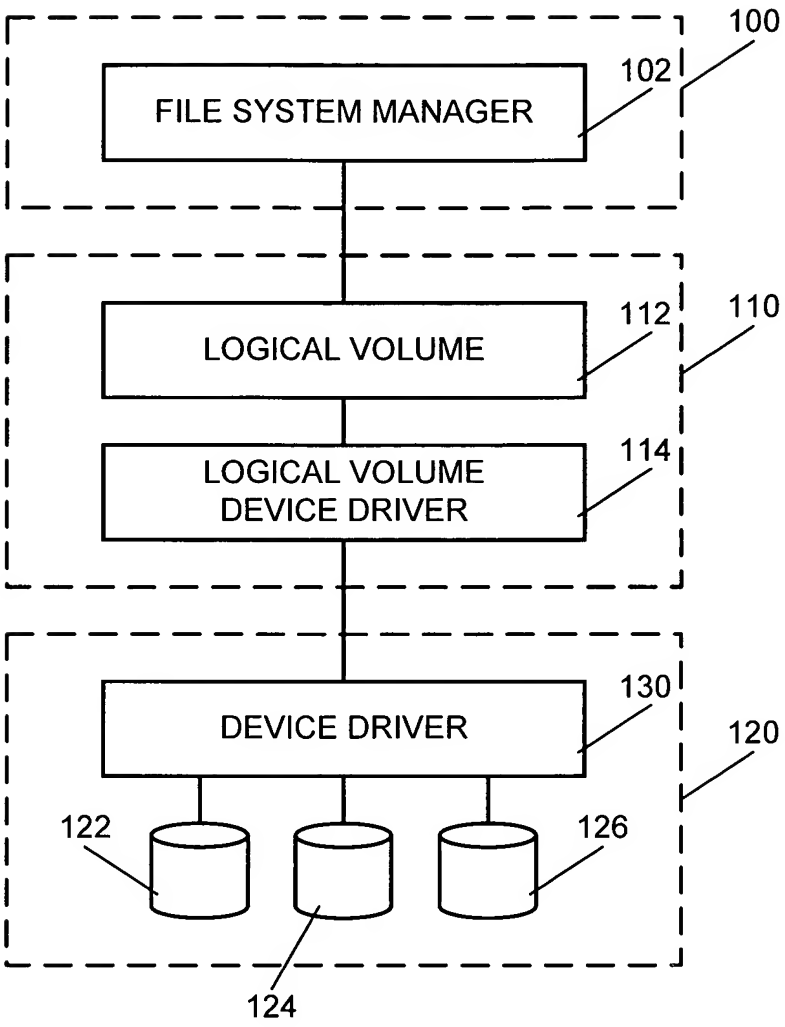

FIG. 1

DATA	LOCATIONS		
	$DISK_1$	$DISK_2$	$DISK_3$
A	$LOCATION_{1A}$	$LOCATION_{2A}$	$LOCATION_{3A}$
B	$LOCATION_{1B}$	$LOCATION_{2B}$	$LOCATION_{3B}$
C	$LOCATION_{1C}$	$LOCATION_{2C}$	$LOCATION_{3C}$

FIG. 2

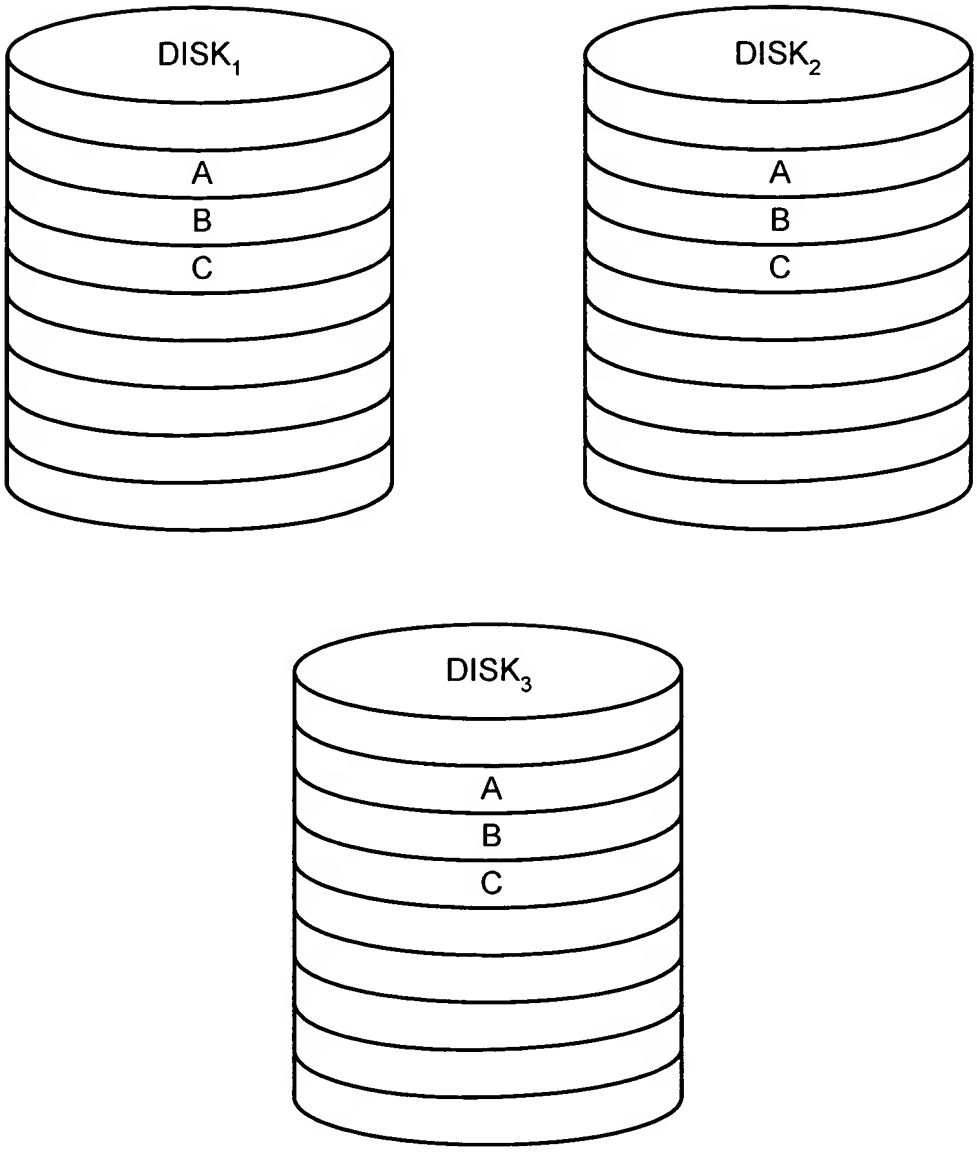

FIG. 3

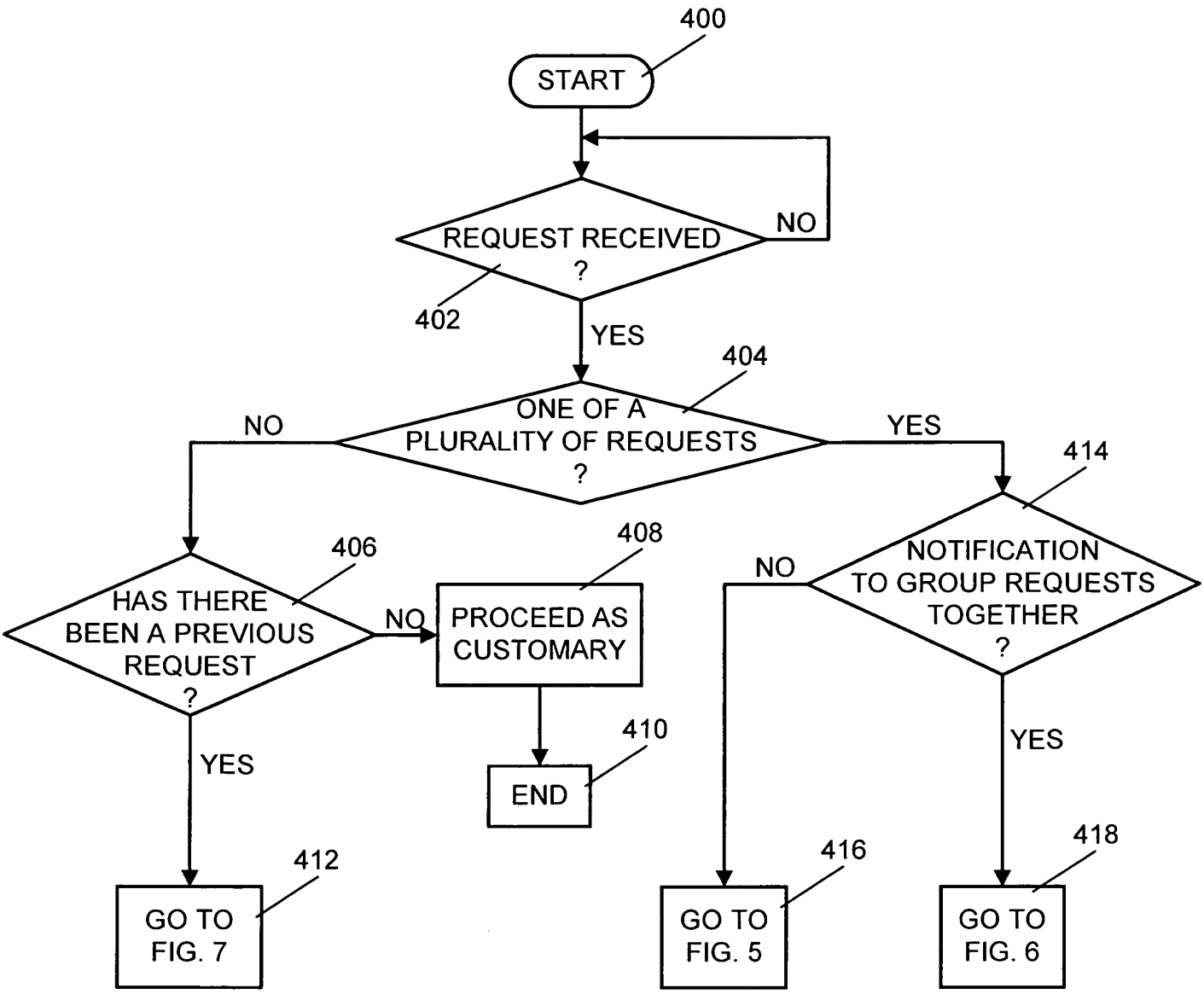
400
START
REQUEST RECEIVED ?
NO
402
YES
404
ONE OF A PLURALITY OF REQUESTS ?
NO
YES
414
406
HAS THERE BEEN A PREVIOUS REQUEST ?
NO
408
PROCEED AS CUSTOMARY
NOTIFICATION TO GROUP REQUESTS TOGETHER ?
NO
YES
410
END
YES
412
GO TO FIG. 7
416
GO TO FIG. 5
418
GO TO FIG. 6

FIG. 4

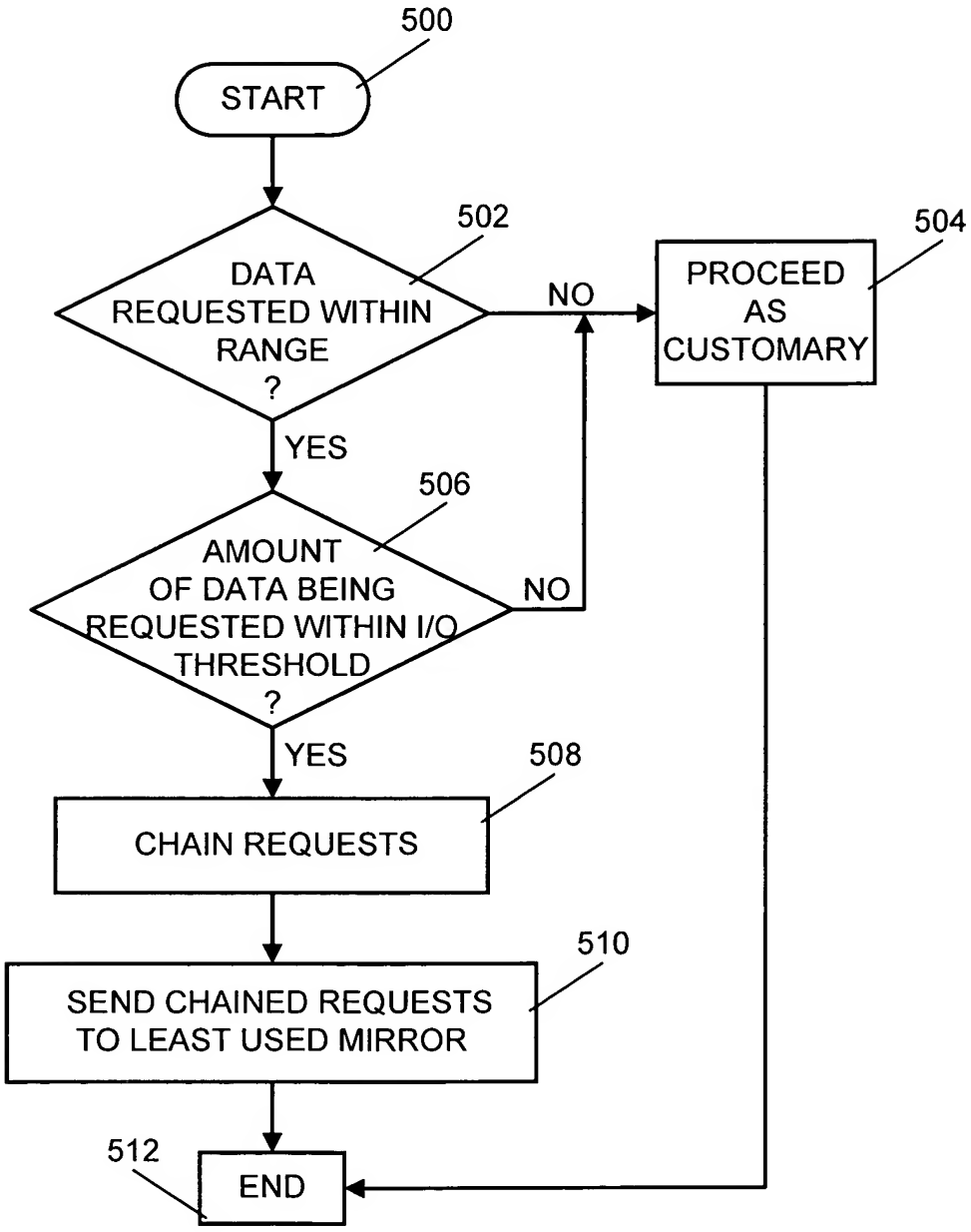
500
START
502
DATA REQUESTED WITHIN RANGE ?
NO
504
PROCEED AS CUSTOMARY
YES
506
AMOUNT OF DATA BEING REQUESTED WITHIN I/O THRESHOLD ?
NO
YES
508
CHAIN REQUESTS
510
SEND CHAINED REQUESTS TO LEAST USED MIRROR
512
END

FIG. 5

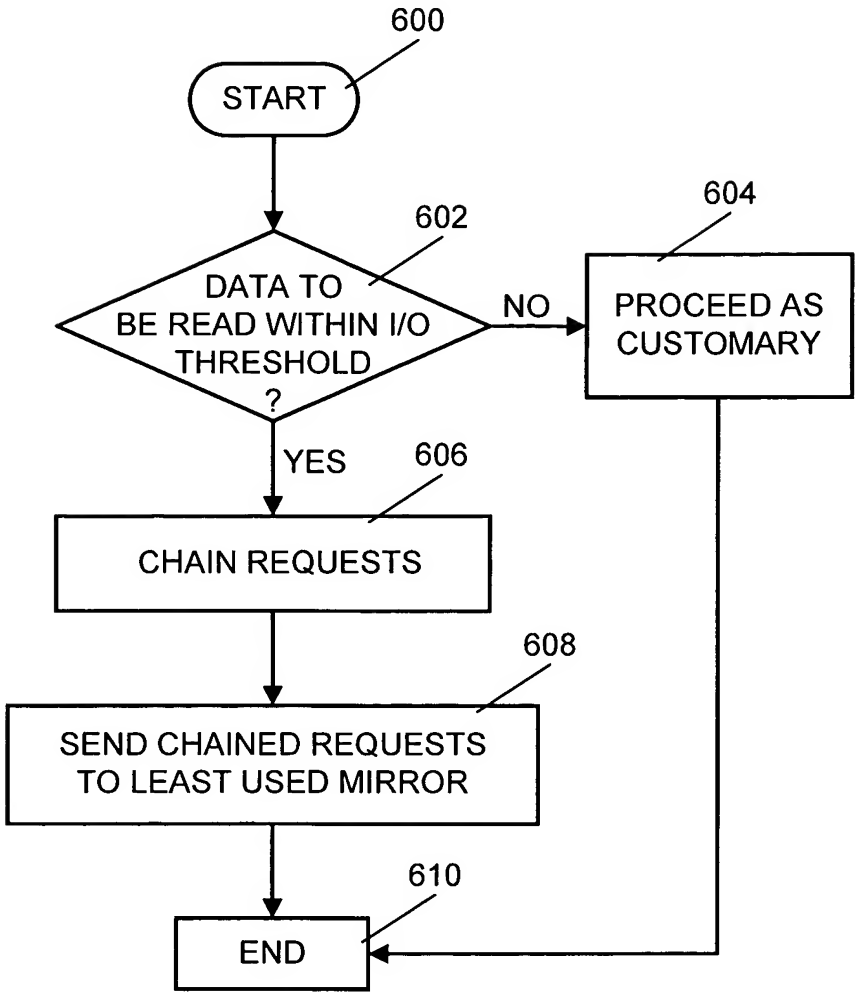
600
START
602
DATA TO BE READ WITHIN I/O THRESHOLD ?
NO
604
PROCEED AS CUSTOMARY
YES
606
CHAIN REQUESTS
608
SEND CHAINED REQUESTS TO LEAST USED MIRROR
610
END

FIG. 6

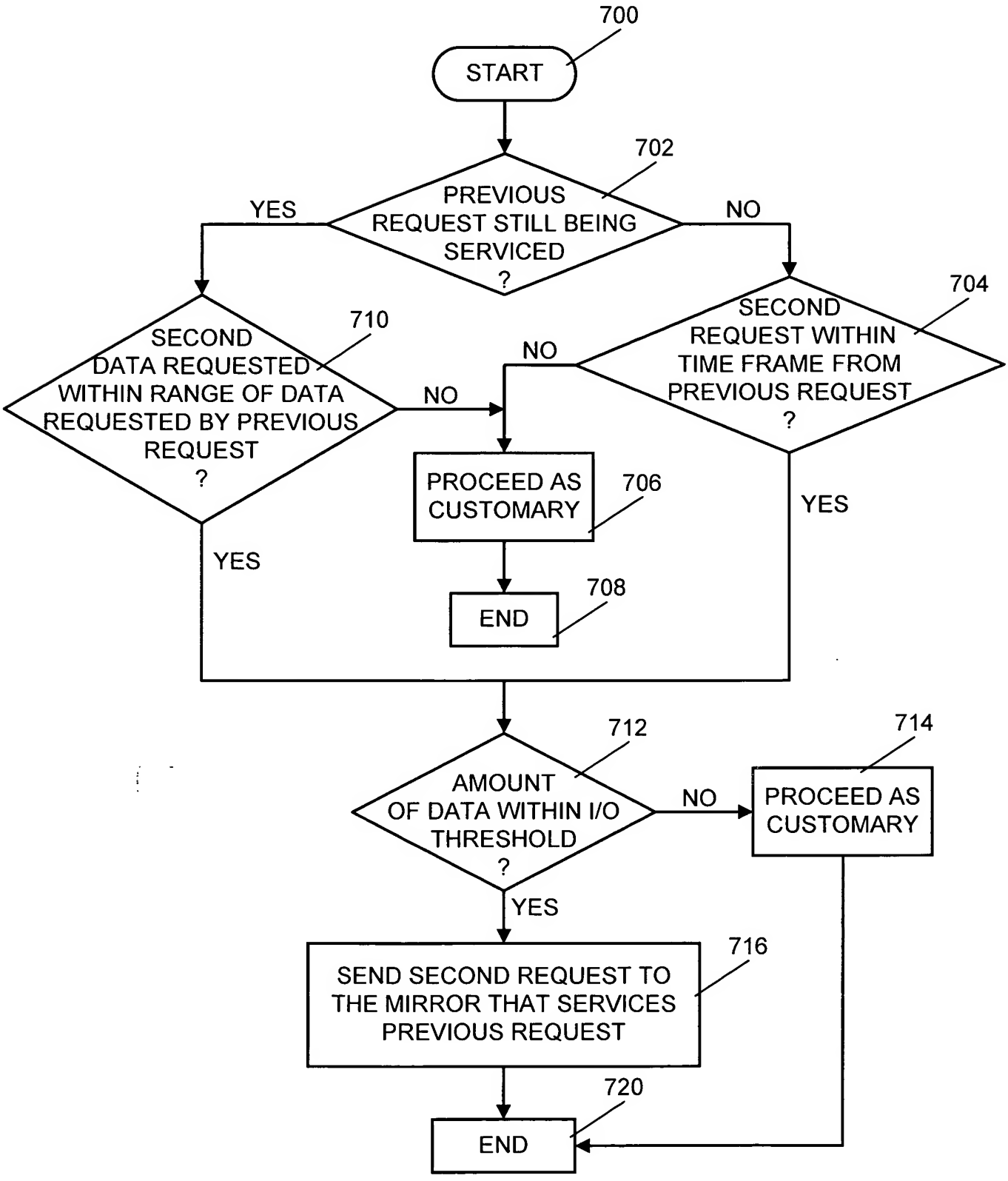
700
START
702
PREVIOUS REQUEST STILL BEING SERVICED ?
YES
NO
704
SECOND REQUEST WITHIN TIME FRAME FROM PREVIOUS REQUEST ?
710
SECOND DATA REQUESTED WITHIN RANGE OF DATA REQUESTED BY PREVIOUS REQUEST ?
NO
NO
YES
YES
PROCEED AS CUSTOMARY
706
END
708
712
AMOUNT OF DATA WITHIN I/O THRESHOLD ?
NO
714
PROCEED AS CUSTOMARY
YES
716
SEND SECOND REQUEST TO THE MIRROR THAT SERVICES PREVIOUS REQUEST
720
END

FIG. 7

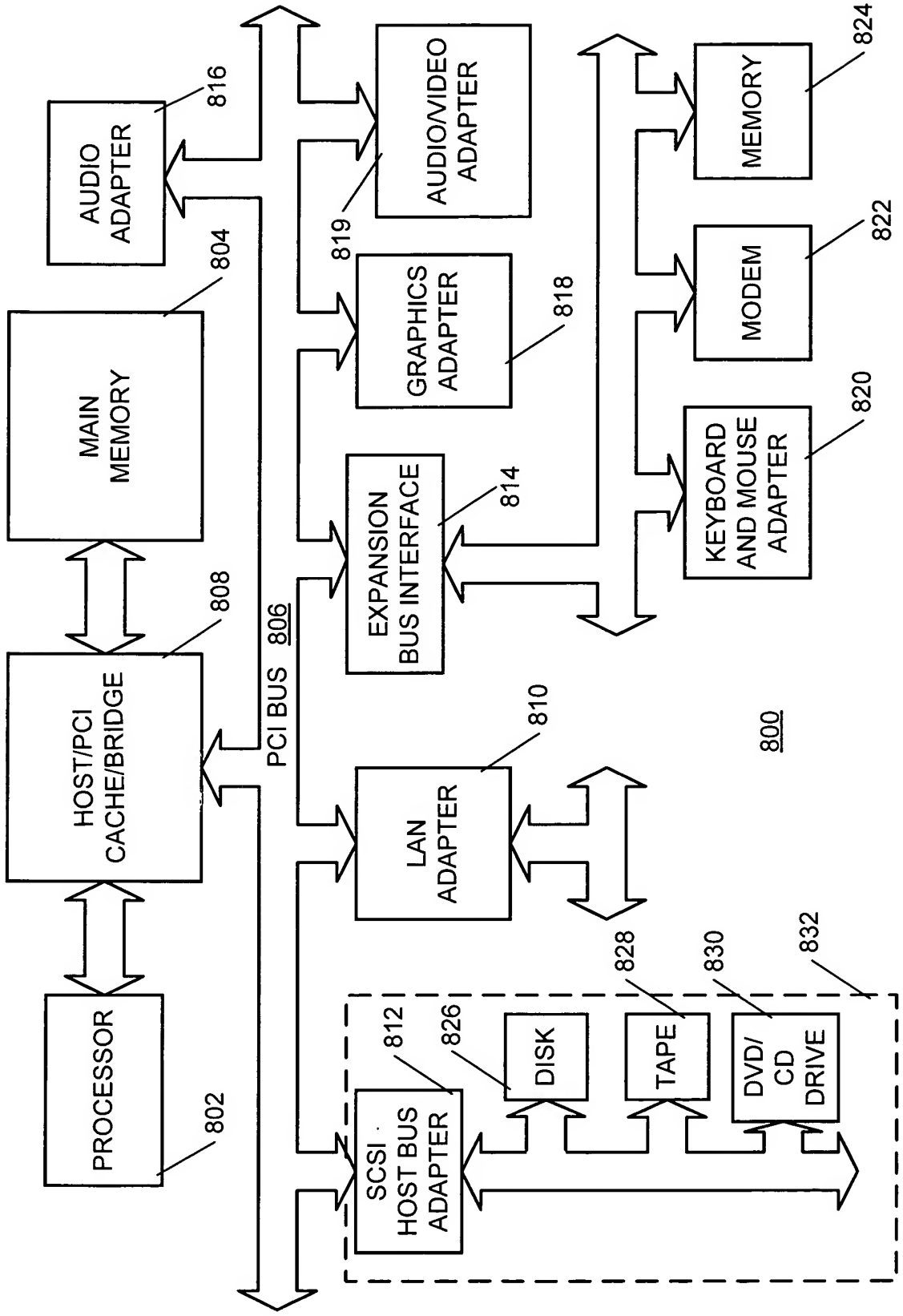
PROCESSOR
802
HOST/PCI CACHE/BRIDGE
808
MAIN MEMORY
804
AUDIO ADAPTER
816
PCI BUS 806
AUDIO/VIDEO ADAPTER
819
GRAPHICS ADAPTER
818
EXPANSION BUS INTERFACE
814
LAN ADAPTER
810
SCSI HOST BUS ADAPTER
812
DISK
826
TAPE
828
DVD/ CD DRIVE
830
832
KEYBOARD AND MOUSE ADAPTER
820
MODEM
822
MEMORY
824
800

FIG.8